

A brief history of OpenEmbedded and the Yocto Project

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Dec 1, 2021

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What is OpenEmbedded

- Started as a build system for embedded devices
- Three basic principles
 - Machine
 - Distribution
 - Image

What is the Yocto Project

- Linux Foundation's first collaborative project
- Membership is limited to Linux Foundation members
- Three membership level Silver, Gold and Platinum
- Provides financial support for testing hardware
- Pays Richard Purdie, Michael Halstead and Steve Sakoman
- Pays Bootlin for documentation and build/integration work.

OpenEmbedded, the early days

- This is before my time, so don't be angry if I get this wrong!
- Created in 2003 by Chris Larson, Michael Lauer, and Holger Schurig
- Unification of OpenZaurus, Familiar Linux and OpenSIMpad projects

OpenEmbedded, things get serious!

- Richard Purdie create Poky subversion repo at OpenedHand in 2005
- First OpenEmbedded Stand at FOSDEM 2007
- FOSDEM 2008 OpenEmbedded forms an organization to support the project
- MontaVista bases Linux product on OpenEmbedded

OpenEmbedded Developers



Excitement!



OpenEmbedded and the Yocto Project

- In 2010, the Yocto Project is announced at ELCE in Cambridge, UK
 - The first of many Linux Foundation Collaborative Projects
- The Yocto Project provides an organization for corporate entities to join
- OpenEmbedded is the Yocto Project technical partner
- OpenEmbedded has a representative on Yocto Project governing board.
- Both organizations have Technical Steering committees
- OpenEmbedded represents the people in the community
- Confusing? Yes it is.

Current OpenEmbedded Leadership (1)

- Four member board, three year terms
 - Philip Balister (Crofton) (Oct 2020)
 - Denys Dmytriienko (denix) (Oct 2021)
 - Jon Mason (jonmason) (Oct 2022)
 - Jan-Simon Moeller (dl9pf) (Oct 2022)

Current OpenEmbedded Leadership (2)

- Five member technical steering committee, two year terms
 - Bruce Ashfield (zeddii) (Sep 2023)
 - Jon Mason (jonmason) (Sep 2023)
 - Joshua Watt (JPEW) (Sep 2023)
 - Paul Eggleton (bluelightning) (Sep 2023)
 - Richard Purdie (RP) (Sep 2023)

What really changed

- OpenEmbedded Classic had one layer for all recipe.
 - Yes I know about collections
- Many developers had push access
- Uneven testing
- No concept of a release
- Everyone was frustrated

Process Improvements

- OpenEmbedded-core created with a subset of recipes
- Layer concept extended to collect recipes into subsets
- OpenEmbedded-core tests patches before the merge
- Yocto Project dues fund autobuilder for large testing matrix
- Two releases per year

The Good

- Core layers build consistently
- Healthy job market for developers
- Layers are available for broad spectrum of software
- You can do anything you want

The Bad

- You can do anything you want
- Error reporting can be confusing
- Usability issues persist

The next ten years!

- What features do we need?
- How do we get new people involved?
- How do we communicate with end users?

Become an OpenEmbedded Member

- Membership open to all with an interest in OpenEmbedded
- Benefits of membership ...
- Responsibilities of membership.
 - Vote for OpenEmbedded board members
 - Vote for OpenEmbedded Technical Steering Committee members
 - Vote for Yocto Project Technical Steering Committee members
- Becoming a member.
 - Send a paragraph about who you are and your involvement
 - To board@openembedded.org
 - The members then approve the new members

Encourage your company to join the Yocto Project

- Dues support several areas.
 - Developers
 - Infrastructure
 - Advocacy
 - Community
 - Training/Developer days
 - Administration/Legal
- Recognition for your company.
- Contact Nicolas Dechesne <nicolas.dechesne@linaro.org>

Questions

Answer my Questions!